



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
HOUSTON BRANCH
10625 FALLSTONE RD.
HOUSTON, TEXAS 77099

November 18, 2013

MEMORANDUM

SUBJECT: Contract Laboratory Program Data Review

Raymond Flores
FROM: Raymond Flores, Alternate ESAT Regional Project Officer
Environmental Services Branch (6MD-HL)

TO: Brian Mueller, Superfund Project Manager (6SF-RL)

Site: FALCON REFINERY

Case#: 43795

SDG#: MF2B33

The EPA Region 6 Environmental Services Branch ESAT data review team has completed a review of the submitted Contract Laboratory Program (CLP) data package for the referenced site. The samples analyzed and reviewed are detailed in the attached Regional data review report.

The data package is acceptable for regional use. Problems, if any, are listed in the report narrative. If you have any questions regarding the data review report, please contact me at (281) 983-2139.

ENVIRONMENTAL SERVICES ASSISTANCE TEAM

ESAT Region 6
10625 Fallstone Road
Houston, TX 77099

Alion Science and Technology

MEMORANDUM

DATE: November 14, 2013
TO: Marvely Humphrey, ESAT PO, Region 6 EPA
FROM: Linda Hoffman, Data Reviewer, ESAT *JK*
THRU: Dominic G. Jarecki, ESAT Program Manager, ESAT *DGJ*
SUBJECT: CLP Data Review

Contract No.: EP-W-06-030
TO No.: 030
Task/Sub-Task: 2-12
ESAT Doc. No.: B030-212-0176
TDF No.: 6-12-023C
ESAT File No.: I-0642

Attached is the data review summary for Case # 43795

SDG # MF2B33
Site Falcon Refinery

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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 10625 FALLSTONE ROAD
 HOUSTON, TEXAS 77099

INORGANIC REGIONAL DATA ASSESSMENT

CASE NO.	43795	SITE	Falcon Refinery
LABORATORY	MITKEM	NO. OF SAMPLES	15
CONTRACT#	EP-W-09-039	MATRIX	Sediment
SDG#	MF2B33	REVIEWER (IF NOT ESB)	ESAT
SOW#	ISM01.3	REVIEWER'S NAME	Linda Hoffman
SF#	303DD2MC	COMPLETION DATE	November 14, 2013

SAMPLE NO.	MF2B18	MF2B30	MF2B42	MF2B54	
	MF2B21	MF2B33	MF2B45	MF2B57	
	MF2B24	MF2B36	MF2B48	MF2B60	
	MF2B27	MF2B39	MF2B51		

DATA ASSESSMENT SUMMARY

	ICP	HG
1. HOLDING TIMES	O	O
2. CALIBRATIONS	O	O
3. BLANKS	O	O
4. MATRIX SPIKES	M	O
5. DUPLICATE ANALYSIS	O	O
6. ICP QC	M	
7. LCS	O	
8. SAMPLE VERIFICATION	O	O
9. OTHER QC	N/A	N/A
10. OVERALL ASSESSMENT	M	O

O = Data had no problems.

M = Data qualified due to major or minor problems.

Z = Data unacceptable.

NA = Not applicable.

ACTION ITEMS:

AREAS OF CONCERN: The antimony matrix spike recovery was below the QC limit. The arsenic and chromium serial dilution differences exceeded the expanded QC limit for soils.

COMMENTS/CLARIFICATIONS
REGION 6 CLP QA REVIEW

CASE 43795 SDG MF2B33 SITE Falcon Refinery LAB MITKEM

COMMENTS: This SDG consisted of 15 sediment samples for total metals (by ICP-MS and ICP-AES) and mercury analyses following SOW ISM01.3. The sampler designated samples MF2B36 and MF2B60 for laboratory QC analyses. After contacting SMO, the laboratory performed QC analyses on sample MF2B36.

The SOW requires that the sediment sample results be adjusted for moisture content, which raised the adjusted QLs above the CRQLs specified in the SOW. The adjusted CRQLs were reported by the laboratory and are referred to as SQLs in this report.

All samples for ICP-MS were analyzed at 5X dilution only. The laboratory managed to meet the CRQL requirement by lowering the concentration for the low initial calibration standard to 1/5 the CRQLs specified in the SOW. Additionally, the laboratory diluted 2X and reanalyzed sample MF2B27 because of high calcium and iron concentrations in this sample for the ICP-AES analysis and because IS 45Sc had a high %RI for the ICP-MS analysis. The ICP-MS reanalysis at the 2X dilution had an acceptable %RI for IS 45Sc, so the results associated with this IS were reported by the laboratory for sample MF2B27.

Sample MF2B27 had a >70% moisture (73.2%), which does not conform to the EPA Office of Water definition of a soil. As a result, all results for sample MF2B27 were flagged with "W" on the DST and should be used with caution.

S3VEM Review was performed for this package as requested by the Region. For this review option, laboratory contractual compliance and technical usability of the sample results are primarily determined by the EDM CCS Defect Report and NFG Data Review Results Report, respectively. The reviewer performs supplemental hardcopy forms checking and applies Region 6 guidelines, where necessary, to account for known limitations of the electronic review process. Therefore, the reviewer's final assessments may deviate from those found in the EDM reports. The NFG Data Review Results Report for the SDG is attached to this report as an addendum for additional information.

OVERALL ASSESSMENT: Some results were qualified for all samples because of problems with a matrix spike recovery and serial dilution differences. ESAT's final data qualifiers in the DST indicate the technical usability of all reported sample results. An Evidence Audit was conducted for the CSF, and the audit results were reported on the Evidence Inventory Checklist. The DST included in this report is the final version.

INORGANIC ACRONYMS

CCB	Continuing Calibration Blank
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CN	Cyanide
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
DST	Data Summary Table
EDM	EXES Data Manager
HG	Mercury
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICP-AES	Inductively Coupled Plasma-Atomic Emission Spectroscopy
ICP-MS	Inductively Coupled Plasma-Mass Spectrometry
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IS	Internal Standard
LCS	Laboratory Control Sample
MDL	Method Detection Limit
NFG	National Functional Guidelines
PE	Performance Evaluation
%D	Percent Difference
%R	Percent Recovery
%RI	Percent Relative Intensity
%RSD	Percent Relative Standard Deviation
QA	Quality Assurance
QC	Quality Control
QL	Quantitation Limit
RPD	Relative Percent Difference
RSCC	Regional Sample Control Center
S3VEM	Stage 3 Validation Electronic and Manual (previously called Modified CADRE Review)
S4VEM	Stage 4 Validation Electronic and Manual (previously called Standard Review)
SDG	Sample Delivery Group
SMO	Sample Management Office
SOW	Statement of Work
SQL	Sample Quantitation Limit
TAL	Target Analyte List

HEADER DEFINITIONS FOR INORGANIC EXCEL DST

CASE: Case Number
SDG: SDG Number
EPASAMP: EPA Sample Number
LABID: Laboratory File/Sample ID
MATRIX: Sample Matrix
QCCOD: Sample QC Code
SMPQUAL: Sample Qualifier
ANDATE: Sample Analysis Date
ANTIME: Sample Analysis Time
CASNUM: Compound CAS Number
ANALYTE: Compound Name
CONC: Compound Concentration
VALDQAL: Region 6 Inorganic Data Validation Qualifier (see
Inorganic Data Qualifier Definitions on the next page)
UNITS: Concentration Units
ADJCRQL: Adjusted Contract Required Quantitation Limit Value
SMPDATE: Sampling Date
PRPDATE: Sample Preparation Date
LRDATE: Laboratory Receipt Date
LEVEL: Sample Level
PERSOLD: Sample Percent Solids
SMPWTVL: Sample Weight (Soil Samples)/Initial Sample Volume (Water
Samples)
FINLVOL: Final Sample Volume
METHOD: Method of Analysis
STATLOC: Station Location

Disclaimer: ESAT verified the accuracy of the information reported in the Excel DST only for the following data fields: CASE, SDG, EPASAMP, MATRIX, ANALYTE, CONC, UNITS, ADJCRQL, VALDQAL, and PERSOLD. The data qualifiers in the VALDQAL column indicate the technical usability of the reported results.

INORGANIC DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the ESAT-Region 6 qualifiers assigned to results in the Data Summary Table.

- U** Not detected at reported quantitation limit.
- L** Reported concentration is between the MDL and the CRQL.
- J** Result is estimated because of outlying quality control parameters such as matrix spike, serial dilution, etc., or the result is below the CRQL.
- R** Result is unusable.
- F** A possibility of a false negative exists.
- UC** Reported concentration should be used as a raised quantitation limit because of blank effects and/or laboratory or field contamination.
- +** High biased. Actual concentration may be lower than the concentration reported.
- Low biased. Actual concentration may be higher than the concentration reported.
- W** The result should be used with caution. The result was reported on a dry weight basis although the sample did not conform to the EPA Office of Water definition of a soil sample because of its high water content (>70% moisture).

CASE	SDG	EPASAMP	LABID	MATRIX	QCPCODE	ANDATE	ANTIME	CASNUM	ANALYTE	CONC	VALDQAL	UNITS	ADJCRL	SMPDATE	PRPDATE	LRDATE	LEVEL	PERSOLD	SMPWT	FINVOL	METHOD	STATLOC
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7429905	Aluminum	13400		mg/kg	39.6	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440360	Antimony	2.3	UJ	mg/kg	2.3	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440382	Arsenic	5.8	J	mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440393	Barium	294		mg/kg	11.6	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440417	Beryllium	1.2	U	mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440439	Cadmium	1.2	U	mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7440702	Calcium	24900		mg/kg	990	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440473	Chromium	8.6	J	mg/kg	2.3	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440484	Cobalt	3.1		mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440508	Copper	12.5		mg/kg	2.3	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7439896	Iron	11700		mg/kg	19.8	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7439921	Lead	8.1		mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7439954	Magnesium	7970		mg/kg	990	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7439965	Manganese	218		mg/kg	3.0	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/03/2013	12:52:25	7439976	Mercury	0.021	LJ	mg/kg	0.23	09/09/2013	10/01/2013	09/14/2013	Low	41.1	0.54	100	CV	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440020	Nickel	7.5		mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7440047	Potassium	4090		mg/kg	990	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7782492	Selenium	0.33	LJ	mg/kg	5.8	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7782494	Silver	1.2	U	mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	09/29/2013	17:34:23	7440235	Sodium	20400		mg/kg	990	09/09/2013	09/27/2013	09/14/2013	Low	41.1	1.23	100	P	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440280	Thallium	1.2	U	mg/kg	1.2	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440622	Vanadium	15.6		mg/kg	5.8	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B18	M1710-13A	S	Field_Sample	10/01/2013	11:28:33	7440666	Zinc	68.2		mg/kg	2.3	09/09/2013	09/30/2013	09/14/2013	Low	41.1	1.05	100	MS	SDB-IC01-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7429905	Aluminum	17700		mg/kg	44.0	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440360	Antimony	2.2	UJ	mg/kg	2.2	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440382	Arsenic	6.7	J	mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440393	Barium	448		mg/kg	11.0	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440417	Beryllium	1.1	U	mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440439	Cadmium	1.1	U	mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7440702	Calcium	25500		mg/kg	1100	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440473	Chromium	13.5	J	mg/kg	2.2	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440484	Cobalt	4.3		mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440508	Copper	22.8		mg/kg	2.2	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7439896	Iron	15400		mg/kg	22.0	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7439921	Lead	13.4		mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7439954	Magnesium	10400		mg/kg	1100	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7439965	Manganese	334		mg/kg	3.3	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/03/2013	12:42:01	7439976	Mercury	0.032	LJ	mg/kg	0.23	09/09/2013	10/01/2013	09/14/2013	Low	37.6	0.59	100	CV	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7440020	Nickel	11.2		mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7440097	Potassium	5560		mg/kg	1100	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7782492	Selenium	0.85	LJ	mg/kg	5.5	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:04:47	7782494	Silver	1.1	U	mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	09/29/2013	17:15:45	7429905	Sodium	27400		mg/kg	1100	09/09/2013	09/27/2013	09/14/2013	Low	37.6	1.21	100	P	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:09:31	7440235	Thallium	1.1	U	mg/kg	1.1	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:09:31	7440417	Vanadium	21.3		mg/kg	5.5	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21	100	MS	SDB-IC02-0-0-0.5
43795	MF2B33	MF2B21	M1710-08A	S	Field_Sample	10/01/2013	11:09:31	7440439	Zinc	115		mg/kg	2.2	09/09/2013	09/30/2013	09/14/2013	Low	37.6	1.21</			

43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/29/2013	17:38:06	7429905	Aluminum	28700	W	mg/kg	19.8	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7440360	Antimony	0.97	UJW	mg/kg	0.97	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440382	Arsenic	8.8	JW	mg/kg	0.97	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7440393	Barium	496	W	mg/kg	4.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440417	Beryllium	0.97	UW	mg/kg	0.97	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7440439	Cadmium	0.80	W	mg/kg	0.49	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/30/2013	12:01:43	7440702	Calcium	31200	W	mg/kg	990	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440473	Chromium	17.8	JW	mg/kg	1.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440484	Cobalt	5.3	W	mg/kg	0.97	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440508	Copper	26.0	W	mg/kg	1.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/30/2013	12:01:43	7439896	Iron	22700	W	mg/kg	19.8	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7439921	Lead	14.6	W	mg/kg	0.49	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/29/2013	17:38:06	7439954	Magnesium	14000	W	mg/kg	495	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/29/2013	17:38:06	7439965	Manganese	494	W	mg/kg	1.5	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/03/2013	12:53:57	7439976	Mercury	0.045	LJW	mg/kg	0.097	09/09/2013	10/01/2013	09/14/2013	Low	26.8	1.93	100	CV	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440020	Nickel	13.8	W	mg/kg	0.97	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/29/2013	17:38:06	7440097	Potassium	8360	W	mg/kg	495	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7782492	Selenium	1.1	LJW	mg/kg	4.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7440224	Silver	0.49	UW	mg/kg	0.49	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	09/29/2013	17:38:06	7440235	Sodium	36100	W	mg/kg	495	09/09/2013	09/27/2013	09/14/2013	Low	26.8	3.77	100	P	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:33:20	7440280	Thallium	0.49	UW	mg/kg	0.49	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440522	Vanadium	27.1	W	mg/kg	4.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B27	M1710-14A	S	Field_Sample	10/01/2013	11:42:51	7440666	Zinc	136	W	mg/kg	1.9	09/09/2013	09/30/2013	09/14/2013	Low	26.8	3.83	100	MS	SDB-IC03-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7429905	Aluminum	2720		mg/kg	20.5	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440360	Antimony	1.2	UJ	mg/kg	1.2	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440382	Arsenic	1.4	J	mg/kg	0.61	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440393	Barium	251		mg/kg	6.1	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440417	Beryllium	0.61	U	mg/kg	0.61	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440439	Cadmium	0.61	U	mg/kg	0.61	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7440702	Calcium	20200		mg/kg	511	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440473	Chromium	1.5	J	mg/kg	1.2	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440484	Cobalt	0.77		mg/kg	0.61	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440508	Copper	2.6		mg/kg	1.2	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7439896	Iron	2660		mg/kg	10.2	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7439921	Lead	2.2		mg/kg	0.61	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7439954	Magnesium	1610		mg/kg	511	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7439965	Manganese	45.9		mg/kg	1.5	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/03/2013	12:44:57	7439976	Mercury	0.0077	LJ	mg/kg	0.017	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.34	100	CV	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7440020	Nickel	1.2		mg/kg	0.12	09/10/2013	10/01/2013	09/14/2013	Low	73.0	0.59	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	09/29/2013	17:23:19	7440097	Potassium	828		mg/kg	511	09/10/2013	09/27/2013	09/14/2013	Low	73.0	1.34	100	P	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-10A	S	Field_Sample	10/01/2013	11:14:16	7782492	Selenium	3.0	U	mg/kg	3.0	09/10/2013	09/30/2013	09/14/2013	Low	73.0	1.13	100	MS	SDB-IC04-0-0-0.5
43795	MF2B33	MF2B30	M1710-02A	S	Field_Sample	09/29/2013	16:46:07	7429905	Aluminum	2920		mg/kg	19.2	09/10/2013	09/27/2013	09/13/2013	Low	74.6	1.4	100	P	SDB-IC05-0-0-0.5
43795	MF2B33	MF2B33	M1710-02A	S	Field_Sample	10/01/2013	10:18:38	74404360	Antimony	0.99	UJ	mg/kg	0.99	09/10/2013	09/30/2013	09/13/2013	Low	74.6	1.35	100	MS	SDB-IC05-0-0-0.5
43795	MF2B33	MF2B33	M1710-02A	S	Field_Sample	10/01/2013	10:18:38	74404382	Arsenic	1.7	J	mg/kg	0.50	09/10/2013	09/30/2013	09/13/2013	Low	74.6	1.35	100	MS	SDB-IC05-0-0-0.5
43795	MF2B33	MF2B33	M1710-02A	S	Field_Sample	10/01/2013	10:18:38	7440393	Barium	290		mg/kg	5.0	09/10/2013	09/30/2013	09/13/2013	Low	74.6	1.35	100	MS	SDB-IC05-0-0-0.5
43795	MF2B33	MF2B33	M1710-02A	S	Field_Sample	10/01/2013	10:18:38	7440417	Beryllium	0.50	U	mg/kg	0.50	09/10/2013	09/30/2013	09/13/2013	Low	74.6	1.35	100	MS	SDB-IC05-0-0-0.5
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43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7429905	Aluminum	4880	mg/kg	25.6	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440360	Antimony	1.2	UJ	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440382	Arsenic	1.7	J	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440393	Barium	326	mg/kg	6.2	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440417	Beryllium	0.52	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440439	Cadmium	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7440702	Calcium	11600	mg/kg	640	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440473	Chromium	2.7	J	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440484	Cobalt	1.2		mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440508	Copper	3.7		mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7438896	Iron	4530	mg/kg	12.8	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7439921	Lead	3.0		mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7439954	Magnesium	2600	mg/kg	640	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7439965	Manganese	58.0	mg/kg	1.9	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/03/2013	12:25:32	7439976	Mercury	0.0081	LJ	mg/kg	0.13	09/10/2013	10/01/2013	09/13/2013	Low	71.1	0.53	100	CV	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440020	Nickel	2.2		mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7440097	Potassium	1560	mg/kg	640	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7782492	Selenium	3.1	U	mg/kg	3.1	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440224	Silver	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	09/29/2013	16:31:19	7440235	Sodium	6340	mg/kg	640	09/10/2013	09/27/2013	09/13/2013	Low	71.1	1.1	100	P	SDB-IC06-0.0-0.5	
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440280	Thallium	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440622	Vanadium	4.4		mg/kg	3.1	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B36	M1710-01A	S	Field_Sample	10/01/2013	09:59:35	7440666	Zinc	23.9		mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	71.1	1.13	100	MS	SDB-IC06-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7429905	Aluminum	1820	mg/kg	22.9	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440360	Antimony	0.94	UJ	mg/kg	0.94	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440382	Arsenic	1.1	J	mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440393	Barium	140	mg/kg	4.7	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440417	Beryllium	0.47	U	mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440439	Cadmium	0.47	U	mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7440702	Calcium	7470	mg/kg	571	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440473	Chromium	3.1	J	mg/kg	0.94	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440484	Cobalt	0.80		mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440508	Copper	2.4		mg/kg	0.94	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7439896	Iron	1830	mg/kg	11.4	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440097	Lead	2.2		mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7439954	Magnesium	1180	mg/kg	571	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7439965	Manganese	30.1	mg/kg	1.7	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/03/2013	12:39:04	7439976	Mercury	0.0050	LJ	mg/kg	0.11	09/11/2013	10/01/2013	09/14/2013	Low	77.4	0.59	100	CV	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7440097	Potassium	610	mg/kg	571	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7782492	Selenium	2.3	U	mg/kg	2.3	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440224	Silver	0.47	U	mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	09/29/2013	17:01:03	7440235	Sodium	4110	mg/kg	571	09/11/2013	09/27/2013	09/14/2013	Low	77.4	1.13	100	P	SDB-IC07-0.0-0.5	
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440280	Thallium	0.47	U	mg/kg	0.47	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B39	M1710-06A	S	Field_Sample	10/01/2013	10:55:18	7440622	Vanadium	3.3		mg/kg	2.3	09/11/2013	09/30/2013	09/14/2013	Low	77.4	1.38	100	MS	SDB-IC07-0.0-0.5
43795	MF2B33	MF2B42	M1710-11A	S	Field_Sample	09/29/2013	17:27:01	7429905	Aluminum	2140	mg/kg	21.6	09/10/2013	09/27/2013	09/14/2013	Low	76.6	1.21	100	P	SDB-IC08-0.0-0.5	
43795	MF2B33	MF2B42	M1710-11A	S	Field_Sample	10/01/2013	11:19:01	7440360	Antimony	1.1	UJ	mg/kg	1.1	09/10/2013	09/30/2013	09/14/2013	Low	76.6	1.17	100	MS	SDB-IC08-0.0-0.5
43795	MF2B33	MF2B42	M1710-11A	S	Field_Sample	10/01/2013	11:19:01	7440382	Arsenic	1.8	J	mg/kg	0.56									

43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7429905	Aluminum	1260	mg/kg	21.4	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440360	Antimony	1.0	UJ	mg/kg	1.0	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440382	Arsenic	0.72	J	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440393	Barium	118	mg/kg	5.1	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440417	Beryllium	0.51	U	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440439	Cadmium	0.51	U	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7440702	Calcium	8870	mg/kg	534	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440473	Chromium	1.2	J	mg/kg	1.0	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440484	Cobalt	0.57	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440508	Copper	1.3	mg/kg	1.0	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7439896	Iron	1350	mg/kg	10.7	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7439921	Lead	1.7	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7439954	Magnesium	912	mg/kg	534	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7439965	Manganese	32.1	mg/kg	1.6	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/03/2013	12:47:55	7439976	Mercury	0.12	U	mg/kg	0.12	09/10/2013	10/01/2013	09/14/2013	Low	78.6	0.53	100	CV	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440020	Nickel	0.92	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7440097	Potassium	445	LJ	mg/kg	534	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7782492	Selenium	2.5	U	mg/kg	2.5	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440224	Silver	0.51	U	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	09/29/2013	17:30:42	7440235	Sodium	3580	mg/kg	534	09/10/2013	09/27/2013	09/14/2013	Low	78.6	1.19	100	P	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440280	Thallium	0.51	U	mg/kg	0.51	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440622	Vanadium	1.9	LJ	mg/kg	2.5	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5
43795	MF2B33	MF2B45	M1710-12A	S	Field_Sample	10/01/2013	11:23:47	7440666	Zinc	9.0	mg/kg	1.0	09/10/2013	09/30/2013	09/14/2013	Low	78.6	1.25	100	MS	SDB-IC09-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7429905	Aluminum	2660	mg/kg	22.2	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440360	Antimony	1.2	UJ	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440382	Arsenic	1.4	J	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440393	Barium	131	mg/kg	6.2	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440417	Beryllium	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440439	Cadmium	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	18:07:54	7440702	Calcium	51900	mg/kg	110	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440473	Chromium	2.0	J	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440484	Cobalt	0.90	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440508	Copper	2.6	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7439886	Iron	2470	mg/kg	11.1	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7439921	Lead	2.6	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7439954	Magnesium	1600	mg/kg	555	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7439965	Manganese	72.7	mg/kg	1.7	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/03/2013	12:34:30	7439976	Mercury	0.010	LJ	mg/kg	0.13	09/10/2013	10/01/2013	09/13/2013	Low	76.3	0.5	100	CV	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440020	Nickel	1.6	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7440037	Potassium	833	mg/kg	555	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7782492	Selenium	3.1	U	mg/kg	3.1	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440224	Silver	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	09/29/2013	16:49:49	7440235	Sodium	3990	mg/kg	555	09/10/2013	09/27/2013	09/13/2013	Low	76.3	1.18	100	P	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440280	Thallium	0.62	U	mg/kg	0.62	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440622	Vanadium	4.1	mg/kg	3.1	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B48	M1710-03A	S	Field_Sample	10/01/2013	10:40:59	7440666	Zinc	15.3	mg/kg	1.2	09/10/2013	09/30/2013	09/13/2013	Low	76.3	1.06	100	MS	SDB-IC10-0-0-0.5	
43795	MF2B33	MF2B51	M1710-04A	S	Field_Sample	09/29/2013	16:53:31	7440702	Aluminum	14500	mg/kg	37.8	09/11/2013	09/27/2013	09/13/2							

43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7429905	Aluminum	14300	mg/kg	45.3	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup	
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440360	Antimony	2.0	UJ	mg/kg	2.0	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440382	Arsenic	4.7	J	mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440393	Barium	387		mg/kg	9.9	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440417	Beryllium	0.99	U	mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440439	Cadmium	0.99	U	mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7440702	Calcium	28900		mg/kg	1130	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440473	Chromium	10.0	J	mg/kg	2.0	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440484	Cobalt	3.0		mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440508	Copper	14.2		mg/kg	2.0	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7439896	Iron	12900		mg/kg	22.6	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7439921	Lead	8.7		mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7439954	Magnesium	9050		mg/kg	1130	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7439965	Manganese	210		mg/kg	3.4	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/03/2013	12:40:32	7439976	Mercury	0.030	LJ	mg/kg	0.25	09/11/2013	10/01/2013	09/14/2013	Low	34.5	0.59	100	CV	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440020	Nickel	8.1		mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7440097	Potassium	4830		mg/kg	1130	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7782492	Selenium	0.52	LJ	mg/kg	4.9	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440224	Silver	0.89	U	mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	09/29/2013	17:12:02	7440235	Sodium	26600		mg/kg	1130	09/11/2013	09/27/2013	09/14/2013	Low	34.5	1.28	100	P	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440280	Thallium	0.99	U	mg/kg	0.99	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440622	Vanadium	14.2		mg/kg	4.9	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B54	M1710-07A	S	Field_Sample	10/01/2013	11:00:03	7440666	Zinc	89.1		mg/kg	2.0	09/11/2013	09/30/2013	09/14/2013	Low	34.5	1.47	100	MS	SD5-01-0-0.5 Dup
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7429905	Aluminum	6850		mg/kg	26.7	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440360	Antimony	1.4	UJ	mg/kg	1.4	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440382	Arsenic	2.8	J	mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440393	Barium	398		mg/kg	6.9	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440417	Beryllium	0.69	U	mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440439	Cadmium	0.69	U	mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7440702	Calcium	20800		mg/kg	667	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440473	Chromium	6.0	J	mg/kg	1.4	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440484	Cobalt	2.1		mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440508	Copper	7.5		mg/kg	1.4	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7439896	Iron	6130		mg/kg	13.3	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7439921	Lead	5.9		mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7439954	Magnesium	3480		mg/kg	667	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7439965	Manganese	95.9		mg/kg	2.0	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/03/2013	12:37:35	7439976	Mercury	0.016	LJ	mg/kg	0.13	09/11/2013	10/01/2013	09/13/2013	Low	65.8	0.58	100	CV	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	10/01/2013	10:50:31	7440020	Nickel	4.8		mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B57	M1710-05A	S	Field_Sample	09/29/2013	16:57:21	7440097	Potassium	1970		mg/kg	667	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	10/01/2013	10:50:31	7782492	Selenium	3.6	U	mg/kg	3.5	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	10/01/2013	10:50:31	7440224	Silver	0.69	U	mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	09/29/2013	17:42:02	7440235	Sodium	7360		mg/kg	667	09/11/2013	09/27/2013	09/13/2013	Low	65.8	1.14	100	P	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	10/01/2013	10:50:31	7440280	Thellium	0.69	U	mg/kg	0.69	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	10/01/2013	10:50:31	7440622	Vanadium	10.0		mg/kg	3.5	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	10/01/2013	10:50:31	7440666	Zinc	47.5		mg/kg	1.4	09/11/2013	09/30/2013	09/13/2013	Low	65.8	1.1	100	MS	SD5-02-0-0.5
43795	MF2B33	MF2B66	M1710-15A	S	Field_Sample	09/29/2013	17:42:02	7440702	Calcium	31000		mg/kg	816	09/11/201								

INORGANIC/ORGANIC COMPLETE SDG FILE (CSF) INVENTORY CHECKLIST

Case No.	43795	SDG No.	MF2B33	SDG Nos. To Follow	Mod. Ref. No.	Date Rec	10/22/13	
EPA Lab ID:	MITKEM			ORIGINALS		YES	NO	N/A
Lab location:	N. Kingstown, RI			CUSTODY SEALS				
Region:	6	Audit No.:	43795/MF2B33			1. Present on package?	X	
Resubmitted CSF?	Yes	No	X	2. Intact upon receipt?		X		
Box No(s):	1			FORM DC-2				
COMMENTS:				3. Numbering scheme accurate?		X		
				4. Are enclosed documents listed?		X		
				5. Are listed documents enclosed?		X		
				FORM DC-1				
				6. Present?		X		
				7. Complete?		X		
				8. Accurate?		X		
				TRAFFIC REPORT/CHAIN-OF-CUSTODY RECORD(s)				
				9. Signed?		X		
				10. Dated?		X		
				AIRBILLS/AIRBILL STICKER				
				11. Present?		X		
				12. Signed?		X		
				13. Dated?		X		
				SAMPLE TAGS				
				14. Does DC-1 list tags as being included?		X		
				15. Present?		X		
				OTHER DOCUMENTS				
				16. Complete?		X		
				17. Legible?		X		
				18. Original?			X	
				18a. If "NO", does the copy indicate where original documents are located?		X		
Over for additional comments.								

Audited Linda Hoffman

Linda Hoffman/ESAT Data Reviewer

Date 11/11/13

Audited Linda Hoffman

Printed Name/Title

Date

Signature

Printed Name/Title

DC-2

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 9/12/2013

CarrierName: FedEx

Airbill No: 7966 3716 6110

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case #: 43795

No: 6-091213-074738-0040

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

Lab Contact: Dawne Smart
Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A55	Soil/ Trent England	Grab	TM+HG(21)	6-451274 (Ice to 4C) (1)	MW-03-0.0-0.5	09/10/2013 13:50		Field Sample
MF2A56	Soil/ Trent England	Grab	TM+HG(21)	6-451279 (Ice to 4C) (1)	MW-03-0.5-2.0	09/10/2013 14:00		Field Sample
MF2A57	Soil/ Trent England	Grab	TM+HG(21)	6-451284 (Ice to 4C) (1)	MW-03-2.0-5.0	09/10/2013 14:10		Field Sample
MF2A61	Soil/ Trent England	Grab	TM+HG(21)	6-451304 (Ice to 4C) (1)	MW-05-0.0-0.5	09/10/2013 15:00		Field Sample
MF2A62	Soil/ Trent England	Grab	TM+HG(21)	6-451309 (Ice to 4C) (1)	MW-05-0.5-2.0	09/10/2013 15:10		Field Sample
MF2A63	Soil/ Trent England	Grab	TM+HG(21)	6-451314 (Ice to 4C) (1)	MW-05-2.0-5.0	09/10/2013 15:15		Field Sample
MF2A73	Soil/ Trent England	Grab	TM+HG(21)	6-451359 (Ice to 4C) (1)	MW-08-0.5-2.0	09/11/2013 14:00		Field Sample
MF2A75	Soil/ Trent England	Grab	TM+HG(21)	6-451369 (Ice to 4C) (1)	MW-10-0.0-0.5	09/11/2013 12:45		Field Sample
MF2B33	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451627 (Ice to 4C) (1)	SDB-IC05-0.0-0.5	09/10/2013 11:00		Field Sample
MF2B48	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451674 (Ice to 4C) (1)	SDB-IC10-0.0-0.5	09/10/2013 14:25		Field Sample

Special Instructions: ICP-AES for: Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium.
ICP-MS for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 9/13/2013

Carrier Name: FedEx

Airbill No: 7966 3717 3410

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case #: 43795

No: 6-091213-124747-0054

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

**Lab Contact: Dawne Smart
Lab Phone: 401-732-3400**

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A17	Soil/ Trent England	Grab	TM+HG(21)	6-451089 (Ice to 4C) (1)	SO3-01-0.0-0.5	09/09/2013 13:15		Field Sample
MF2A26	Soil/ Trent England	Grab	TM+HG(21)	6-451134 (Ice to 4C) (1)	SO3-03-2.0-5.0	09/09/2013 15:45		Field Sample
MF2A35	Soil/ Trent England	Grab	TM+HG(21)	6-451179 (Ice to 4C) (1)	SO4-02-0.5-2.0	09/10/2013 10:55		Field Sample
MF2A36	Soil/ Trent England	Grab	TM+HG(21)	6-451184 (Ice to 4C) (1)	SO4-02-2.0-3.0	09/10/2013 11:05		Field Sample
MF2A38	Soil/ Trent England	Grab	TM+HG(21)	6-451194 (Ice to 4C) (1)	SO4-03-0.5-2.0	09/10/2013 11:30		Field Sample
MF2B21	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451591 (Ice to 4C) (1)	SDB-IC02-0.0-0.5	09/09/2013 14:40		Field Sample
MF2B24	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451600 (Ice to 4C) (1)	SDB-IC02-0.0-0.5 Dup	09/09/2013 14:40		Field Duplicate
MF2B30	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451618 (Ice to 4C) (1)	SDB-IC04-0.0-0.5	09/10/2013 09:50		Field Sample
MF2B42	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451656 (Ice to 4C) (1)	SDB-IC08-0.0-0.5	09/10/2013 16:20		Field Sample
MF2B45	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451665 (Ice to 4C) (1)	SDB-IC09-0.0-0.5	09/10/2013 15:40		Field Sample

Special Instructions: ICP-AES for Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium.

ICP-MS for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TM+HG=TM+Hg by ISM01.3, ICP-AES+MS

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 9/12/2013

Carrier Name: FedEx

Airbill No: 7966 3716 7068

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case #: 43795

No: 6-091213-093957-0044

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

Lab Contact: Dawne Smart

Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A27	Soil/ Trent England	Grab	TM+HG(21)	6-451139 (Ice to 4C) (1)	MW-17-0-0-5	09/10/2013 08:15		Field Sample
MF2A28	Soil/ Trent England	Grab	TM+HG(21)	6-451144 (Ice to 4C) (1)	MW-17-0.5-2.0	09/10/2013 08:28		Field Sample
MF2A29	Soil/ Trent England	Grab	TM+HG(21)	6-451149 (Ice to 4C) (1)	MW-17-2.0-3.5	09/10/2013 08:30		Field Sample
MF2A33	Soil/ Trent England	Grab	TM+HG(21)	6-451169 (Ice to 4C) (1)	SO4-01-2.0-3.0	09/10/2013 09:10		Field Sample
MF2A34	Soil/ Trent England	Grab	TM+HG(21)	6-451174 (Ice to 4C) (1)	SO4-02-0.0-0.5	09/10/2013 10:45		Field Sample
MF2A37	Soil/ Trent England	Grab	TM+HG(21)	6-451189 (Ice to 4C) (1)	SO4-03-0.0-0.5	09/10/2013 11:22		Field Sample
MF2A52	Soil/ Trent England	Grab	TM+HG(21)	6-451259 (Ice to 4C) (1)	MW-02-0.0-0.5	09/11/2013 07:35		Field Sample
MF2A53	Soil/ Trent England	Grab	TM+HG(21)	6-451264 (Ice to 4C) (1)	MW-02-0.5-2.0	09/11/2013 07:50		Field Sample
MF2A54	Soil/ Trent England	Grab	TM+HG(21)	6-451269 (Ice to 4C) (1)	MW-02-2.0-4.0	09/11/2013 08:00		Field Sample
MF2B36	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451636 (Ice to 4C) (1)	SDB-IC06-0.0-0.5	09/10/2013 12:40		Field Sample

Sample(s) to be used for Lab QC: MF2B36 - Special Instructions: ICP-AES for: Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium.

ICP-MS for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TM+HG=TM+Hg by ISM01.3, ICP-AES+MS

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DateShipped: 9/12/2013

CarrierName: FedEx

Airbill No: 7966 3716 5890

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case # 43795

No: 6-091213-065349-0035

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

Lab Contact: Dawne Smart
Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A48	Soil/ Trent England	Grab	TM+HG(21)	6-451239 (Ice to 4C) (1)	MW-01-0.0-0.5	09/11/2013 08:25		Field Sample
MF2A50	Soil/ Trent England	Grab	TM+HG(21)	6-451249 (Ice to 4C) (1)	MW-01-0.5-2.0	09/11/2013 08:35		Field Sample
MF2A58	Soil/ Trent England	Grab	TM+HG(21)	6-451289 (Ice to 4C) (1)	MW-04-0.0-0.5	09/11/2013 09:10		Field Sample
MF2A59	Soil/ Trent England	Grab	TM+HG(21)	6-451294 (Ice to 4C) (1)	MW-04-0.5-2.0	09/11/2013 09:20		Field Sample
MF2A60	Soil/ Trent England	Grab	TM+HG(21)	6-451299 (Ice to 4C) (1)	MW-04-2.0-5.0	09/11/2013 09:30		Field Sample
MF2A74	Soil/ Trent England	Grab	TM+HG(21)	6-451364 (Ice to 4C) (1)	MW-08-2.0-5.0	09/11/2013 14:15		Field Sample
MF2A82	Soil/ Trent England	Grab	TM+HG(21)	6-451404 (Ice to 4C) (1)	MW-12-0.0-0.5	09/11/2013 10:50		Field Sample
MF2A83	Soil/ Trent England	Grab	TM+HG(21)	6-451409 (Ice to 4C) (1)	MW-12-0.5-2.0	09/11/2013 11:00		Field Sample
MF2B51	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451683 (Ice to 4C) (1)	SD5-01-0.0-0.5	09/11/2013 10:40		Field Sample
MF2B57	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451707 (Ice to 4C) (1)	SD5-02-0.0-0.5	09/11/2013 12:20		Field Sample

Special Instructions: ICP-AES for Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium.

ICP-MS for Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

Shipment for Case Complete? N

Samples Transferred From Chain of Custody #

Analysis Key: TM+HG=TM+Hg by ISM01.3, ICP-AES+MS

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 9/13/2013

CarrierName: FedEx

Airbill No: 7966 3717 3501

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case #: 43795

No: 6-091213-111016-0048

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

Lab Contact: Dawne Smart
Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A00	Soil/ Trent England	Grab	TM+HG(21)	6-451004 (Ice to 4C) (1)	MW-13-0.0-0.5	09/12/2013 08:15	F2A00	Field Sample
MF2A01	Soil/ Trent England	Grab	TM+HG(21)	6-451009 (Ice to 4C) (1)	MW-13-0.5-2.0	09/12/2013 08:25		Field Sample
MF2A02	Soil/ Trent England	Grab	TM+HG(21)	6-451014 (Ice to 4C) (1)	MW-13-2.0-5.0	09/12/2013 08:35		Field Sample
MF2A49	Soil/ Trent England	Grab	TM+HG(21)	6-451244 (Ice to 4C) (1)	MW-01-0.0-0.5 Dup	09/11/2013 08:25		Field Duplicate
MF2A51	Soil/ Trent England	Grab	TM+HG(21)	6-451254 (Ice to 4C) (1)	MW-01-2.0-5.0	09/11/2013 08:45		Field Sample
MF2A78	Soil/ Trent England	Grab	TM+HG(21)	6-451384 (Ice to 4C) (1)	MW-11-0.0-0.5	09/12/2013 09:10		Field Sample
MF2A79	Soil/ Trent England	Grab	TM+HG(21)	6-451389 (Ice to 4C) (1)	MW-11-0.0-0.5 Dup	09/12/2013 09:10		Field Duplicate
MF2A80	Soil/ Trent England	Grab	TM+HG(21)	6-451394 (Ice to 4C) (1)	MW-11-0.5-2.0	09/12/2013 09:20		Field Sample
MF2B39	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451647 (Ice to 4C) (1)	SDB-IC07-0.0-0.5	09/11/2013 16:00		Field Sample
MF2B54	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451695 (Ice to 4C) (1)	SD5-01-0.0-0.5 Dup	09/11/2013 10:40		Field Duplicate

Sample(s) to be used for Lab QC: MF2A00 - Special Instructions: ICP-AES for: Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium.

Shipment for Case Complete? N

ICP-MS for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc

Samples Transferred From Chain of Custody #

Analysis Key: TM+HG=TM+Hg by ISM01.3, ICP-AES+MS

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
	Jill	9-13-13	Jill		09-13-13 0800						
	Mrs. Sall	9-13-13	Jill		09-13-13 0800						
			Jill		09-13-13						

USEPA CLP Inorganics COC (REGION COPY)

DateShipped: 9/13/2013

CarrierName: FedEx

Airbill No: 7966 3717 2560

CHAIN OF CUSTODY RECORD

Falcon Refinery Superfund Site/TX

Case #: 43795

No: 6-091213-131023-0055

Lab: Spectrum Analytical, Inc. DBA: MITKEM Laboratories

Lab Contact: Dawne Smart
Lab Phone: 401-732-3400

Inorganic Sample #	Matrix/Sampler	Coll. Method	Analysis/Turnaround	Tag/Preservative/Bottles	Station Location	Collected	Organic Sample #	Sample Type
MF2A18	Soil/ Trent England	Grab	TM+HG(21)	6-451094 (Ice to 4C) (1)	SO3-01-0.5-2.0	09/09/2013 13:30		Field Sample
MF2A23	Soil/ Trent England	Grab	TM+HG(21)	6-451119 (Ice to 4C) (1)	SO3-03-0.0-0.5	09/09/2013 15:15		Field Sample
MF2A24	Soil/ Trent England	Grab	TM+HG(21)	6-451124 (Ice to 4C) (1)	SO3-03-0.0-0.5 Dup	09/09/2013 15:15		Field Duplicate
MF2A25	Soil/ Trent England	Grab	TM+HG(21)	6-451129 (Ice to 4C) (1)	SO3-03-0.5-2.0	09/09/2013 15:30		Field Sample
MF2A72	Soil/ Trent England	Grab	TM+HG(21)	6-451354 (Ice to 4C) (1)	MW-08-0.0-0.5	09/11/2013 13:50		Field Sample
MF2A76	Soil/ Trent England	Grab	TM+HG(21)	6-451374 (Ice to 4C) (1)	MW-10-0.5-2.0	09/11/2013 13:00		Field Sample
MF2A77	Soil/ Trent England	Grab	TM+HG(21)	6-451379 (Ice to 4C) (1)	MW-10-2.0-4.5	09/11/2013 13:15		Field Sample
MF2B18	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451582 (Ice to 4C) (1)	SDB-IC01-0.0-0.5	09/09/2013 12:45		Field Sample
MF2B27	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451609 (Ice to 4C) (1)	SDB-IC03-0.0-0.5	09/09/2013 16:15		Field Sample
MF2B60	Sediment/ Alex Spiller	Grab	TM+HG(21)	6-451719 (Ice to 4C) (1)	SD5-03-0.0-0.5	09/11/2013 14:10		Field Sample

Sample(s) to be used for Lab QC: MF2B60 - Special Instructions: ICP-AES for: Aluminum, Calcium, Iron, Magnesium, Manganese, Potassium, Sodium. ICP-MS for: Antimony, Arsenic, Barium, Beryllium, Cadmium, Chromium, Cobalt, Copper, Lead, Nickel, Selenium, Silver, Thallium, Vanadium, Zinc	Shipment for Case Complete? N
Analysis Key: TM+HG=TM+Hg by ISM01.3, ICP-AES+MS	Samples Transferred From Chain of Custody #

ADDENDUM

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports**Blanks**

Blanks	ICP_AES
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	PBS57
	Calcium PBS57
Blanks	ICP_AES
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs.
	PBS57
	Calcium PBS57
Blanks	ICP_AES
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_AES
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_AES
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Calcium LCS57, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60

National Functional Guidelines Report #03

Lab	MITKEM(Mitkem Laboratories)	SDG	MF2B33	Case	43795	Contract	EPW09039	Region	6	DDTID	183649	SOW	ISM01.3
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Data Review Reports

Blanks

Blanks	ICP_MS
ND03	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs. MF2B36L, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, PBS62 Cobalt MF2B36L Beryllium MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60 Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57, PBS62 Thallium MF2B27, MF2B36
Blanks	ICP_MS
ND04	The following samples have analyte results greater than or equal to MDLs but less than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated at CRQLs. MF2B36L, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, PBS62 Arsenic MF2B36L Cobalt MF2B36L Beryllium MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60 Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57, PBS62 Thallium MF2B27, MF2B36 Cadmium MF2B18, MF2B21, MF2B24, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60 Silver MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Blanks	ICP_MS
ND05	The following samples have analyte results greater than CRQLs. The associated ICB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes. LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, MF2B36A Cobalt LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60 Beryllium LCS62, MF2B36S Antimony LCS62, MF2B36A, MF2B36S Thallium LCS62, MF2B36S
Blanks	ICP_MS
ND06	The following samples have analyte results greater than CRQLs. The associated CCB analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualified detected and nondetected analytes.

National Functional Guidelines Report #03

Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Blanks

Blanks	ICP_MS
	LCS62, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B36S, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60, MF2B6A
	Arsenic LCS62, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B36S
	Cobalt LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Barium LCS62, MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B36S, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Beryllium LCS62, MF2B21, MF2B24, MF2B27, MF2B36S
	Antimony LCS62, MF2B36A, MF2B36S
	Thallium LCS62, MF2B36S
	Cadmium LCS62, MF2B21, MF2B24, MF2B27, MF2B36S
	Silver LCS62, MF2B36S
Blanks	ICP_MS
NE04	The following samples have analyte results greater than or equal to MDLs but less than or equal to CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Detected analytes are qualified U. Nondetected analytes are not qualified. Sample results are elevated to CRQLs.
	MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57
	Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57
Blanks	ICP_MS
NE05	The following samples have analyte results greater than CRQLs. The associated preparation blank analyte results are greater than or equal to MDLs but less than or equal to CRQLs. Use professional judgment to qualify detected and nondetected analytes.
	LCS62, MF2B36A, MF2B36S
	Antimony LCS62, MF2B36A, MF2B36S

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Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports**Detection Limit**

Detection Limit	Hg
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified J.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
Mercury	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60

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Data Review Reports

Detection Limit

Detection Limit	
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified.
	PBS57, MF2B36L, MF2B45
	Calcium PBS57
	Potassium MF2B36L , MF2B45
	Magnesium MF2B36L

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Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports**Detection Limit**

Detection Limit	ICP_MS
NDL1	The following samples have results greater than or equal to MDLs but less than CRQLs. Detected analytes are qualified.
	MF2B30, MF2B36L, MF2B45, MF2B18, MF2B21, MF2B24, MF2B27, MF2B33, MF2B36D, MF2B51, MF2B54, MF2B60, MF2B36, MF2B39, MF2B42, MF2B48, MF2B57, PBS62
	Vanadium MF2B30, MF2B36L, MF2B45
	Arsenic MF2B36L
	Chromium MF2B36L
	Nickel MF2B36L
	Copper MF2B36L
	Lead MF2B36L
	Selenium MF2B18, MF2B21, MF2B24, MF2B27, MF2B33, MF2B36D, MF2B51, MF2B54, MF2B60
	Cobalt MF2B36L
	Beryllium MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Antimony MF2B21, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B36L, MF2B39, MF2B42, MF2B48, MF2B51, MF2B54, MF2B57, PBS62
	Cadmium MF2B18, MF2B21, MF2B24, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Thallium MF2B27, MF2B36
	Silver MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B36D, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60

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Data Review Reports

Duplicates

Duplicates	ICP_MS
NI03	The following Duplicate and original sample results are greater than 5xCRQL and RPD is greater than 20. The original sample results are greater than or equal to MDLs. Detected analytes are qualified J. Nondetected analytes are qualified UI. MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Barium MF2B36D
	Zinc MF2B36D
Duplicates	ICP_MS
NI04	The following Duplicate or original sample results are less than or equal to 5xCRQL and the absolute difference between duplicate and original samples are greater than CRQL. The original sample results are greater than or equal to MDLs. Detected analytes are qualified J. Nondetected analytes are qualified UI. MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Nickel MF2B36D
	Copper MF2B36D
	Lead MF2B36D

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Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	Hg
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+/-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

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Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	ICP_AES
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes. MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

National Functional Guidelines Report #03

Lab	MITKEM(Mitkem Laboratories)	SDG	MF2B33	Case	43795	Contract	EPW09039	Region	6	DDTID	183649	SOW	ISM01.3
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Data Review Reports

Holding Times/Preservation

Holding Times/Preservation	ICP_MS
NHT01	The following preserved samples are improperly maintained at temperatures outside the range of 4+-2 C. Detected analytes with results greater than or equal to MDLs are qualified J-. Use professional judgment to qualify the nondetected analytes.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B39, MF2B42, MF2B45, MF2B51, MF2B54, MF2B57, MF2B60

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Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Matrix Spikes

Matrix Spikes	ICP MS
NG08	The following Matrix Spike samples have percent recoveries less than 30% and post-digestion spike samples have percent recoveries greater than or equal to 75%. Detected analytes with results greater than or equal to MDLs are qualified J. Nondetected analytes are qualified UJ.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Antimony MF2B36S

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Lab MITKEM(Mitkem Laboratories) SDG MF2B33 Case 43795 Contract EPW09039 Region 6 DDTID 183649 SOW ISM01.3

Data Review Reports

Serial Dilution

Serial Dilution	ICP_MS
NL032	The following ICP-MS Serial Dilution (SD) samples have percent difference (%D) greater than 10% and initial sample results are greater than 50xMDLs. The detected analytes in samples with results greater than or equal to MDLs are qualified J. Nondetected analytes in samples are qualified U.
	MF2B18, MF2B21, MF2B24, MF2B27, MF2B30, MF2B33, MF2B36, MF2B39, MF2B42, MF2B45, MF2B48, MF2B51, MF2B54, MF2B57, MF2B60
	Chromium MF2B36L